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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,086	03/18/2002	Chung-Yuan Liu	CMOP0016USA	4842
27765	7590	12/24/2003	EXAMINER	
NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)			DUONG, THOI V	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	
			2871	

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/063,086

Applicant(s)

LIU, CHUNG-YUAN

Examiner

Thoi V Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-9 and 11-13 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-9 and 11-13 ~~is/are~~ rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This office action is in response to the Amendment filed September 05, 2003.

Accordingly, claims 1, 5, 7 and 13 were amended, and claims 4 and 10 were cancelled. Currently, claims 1-3, 5-9 and 11-13 are pending in this application.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 7 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 5-9, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Kubota et al. (Pub. No. US 2003/0053016 A1).

With respect to claims 7-9, 11 and 12, as shown in Figs. 15-17, Kubota et al. discloses a multi-slants reflector applied in a liquid crystal display (LCD), the multi-slants reflector comprising:

- a substrate 4;
- a plurality of thin film transistors 3 disposed on the substrate;
- a reflective metal layer 2;
- a plurality of asymmetric slants 7, each comprising a multi-layered structure, located between the substrate and the reflective metal layer; and
- an insulating layer 8,8' located between said reflective metal layer and said multi-layered structure,

wherein each layer of said multi-layered structure has substantially different widths (Fig. 16 and page 10, paragraph 202);

wherein each of said asymmetric slants has substantially different angles between an upper surface of the reflective metal layer and an upper surface of the substrate, wherein said angles range from 6 degrees to approximately 15 degrees (page 1, paragraph 11);

wherein each of said asymmetric slants has substantially different heights (Fig. 16); and

wherein said multi-layered structure is a random composition of a gate metal layer 5', a gate insulation layer 15, an a-Si layer 16'a, an N⁺ layer, and a source/drain metal layer 18'a (page 8, paragraph 177).

As shown in Fig. 18, Kubota et al. also discloses that the insulating layer 42 is made of photosensitive resin comprised of organic material (page 11, paragraphs 205 and 205).

With respect to claim 1, as shown in Figs 15-17, Kubota et al. discloses a method for manufacturing a multi-slants reflector comprising the steps of:

- providing a substrate 4;
- forming a plurality of thin film transistors 3 and a plurality of multi-layered structures 7 on the substrate simultaneously;
- coating an organic layer on said thin film transistors and said multi-layered structures (as layer 42 in Figs. 18 and 19 and page 11, paragraphs 205 and 206);
- performing a baking step to smooth the organic layer so as to form a plurality of asymmetric slants (page 11, paragraphs 205 and 206); and
- forming a reflective metal layer 2 on the organic layer,

wherein each of said asymmetric slants comprises said multi-layered structure, and each layer of said multi-layered structure has substantially different widths (Fig. 16 and page 10, paragraph 202).

With respect to claim 13, as shown in Figs. 15-17, Kubota et al. discloses a method for manufacturing a multi-slants reflector comprising the steps of:

- providing a substrate 4;
- forming a plurality of thin film transistors 3 and a plurality of multi-layered structures 7 on the substrate simultaneously;

Art Unit: 2871

coating a protection layer 8,8' on said thin film transistors and said multi-layered structures; and

forming a reflective metal layer 2 on said protection layer,

wherein each layer of said multi-layered structure has substantially different widths (Fig. 16 and page 10, paragraph 202).

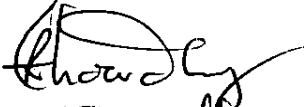
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong 

12/12/2003


T. Choudhry
Primary Examiner